

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for improving ~~one or more physical/chemical characteristics~~ **radiostability** of a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution **during autoclaving**, which method comprises the steps of:

- a) provision of a ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution, and
- b) addition of at least one buffer based on a weak acid to the ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution.

2. (Previously Presented) The method according to claim 1, wherein the improved physical/chemical characteristic is the ability of the ^{18}F -FDG-solution to maintain radiochemical purity after being autoclaved, thus rendering the solution suitable for medical applications.

3. (Canceled).

4. (Original) The method according to claim 1, wherein the buffer based on a weak acid, is selected from the group consisting of citrate, acetate, ascorbate and combinations thereof.

5. (Original) The method according to claim 4, wherein the pH of the citrate buffer is lower than 5.5, preferably between pH 2 and 5.5.

6. (Withdrawn) The method according to claim 4, wherein the pH of the acetate buffer is between 3.0 and 5.5.

7. (Withdrawn) The method according to claim 4, wherein the pH of the ascorbate buffer is between 3.0 and 5.5.

8. (Withdrawn) A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a the ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature between 110°C and 145°C .

9. (Withdrawn) A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature between 130°C and 140°C .

10. (Withdrawn) A method of preparing a sterile ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution by autoclaving a ^{18}F -fluor-deoxy-glucose (FDG)-solution at a temperature of 134°C .

11. (Withdrawn) The method according to claim 8, wherein the autoclaving process is performed for a period of 1 to 30 minutes.

12. (Withdrawn) The method according to claim 8, wherein the autoclaving process is performed for a period of 1 to 10 minutes.

13. (Withdrawn) The method according to claim 8, wherein the autoclaving process is performed for a period of 2 to 5 minutes.

14. (Withdrawn) A ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution with improved physical/chemical characteristics obtained by the method of claim 1.

15. (Withdrawn) A sterile fludeoxyglucose (FDG)-solution obtained by the method of claim 8.

16. (Previously Presented) The method of claim [2] 1, wherein the radiochemical purity of the ^{18}F -fluor-deoxy-glucose (^{18}F -FDG)-solution is at least 95%.